What is claimed is:

1. A micromachined varactor comprising a deflecting beam, a pair of signal path plates attached to the deflecting beam and a means of deflecting said beam, wherein said varactor is packaged in an airtight vacuum.

2. The varactor of claim 1, wherein said deflecting beam is attached to a dielectric substrate and wherein said means of deflecting said beam comprises a first and a second actuator plate, said first actuator plate being attached to said beam and said second actuator plate being attached to said substrate.

3. The varactor of claim 2, wherein said deflecting beam is a cantilever beam.

4. The varactor of claim 1, wherein said deflecting beam is a beam with a first and a second end and said first and said second end are fixed and wherein said means of deflecting said beam comprises a first and a second actuator plate, said first actuator plate being attached to said beam and said second actuator plate being attached to said substrate.

5. A method of eliminating Brownian noise in a micromachined varactor, comprising the steps of:

packaging said varactor in an airtight chamber,

removing all gas molecules from said chamber, and

sealing said chamber to form a vacuum.

6. The method of claim 5 wherein packaging said varactor in an airtight chamber comprises the steps attaching said varactor to a dielectric substrate, placing a dielectric material around said varactor and attaching said material to said substrate.

7. The method of claim 5, wherein said varactor comprises a deflectable beam and a pair of signal path plates connected to said beam.

8. The method of claim 7, wherein said deflectable beam is a cantilever beam.

9. The method of claim 7, wherein said deflectable beam is a beam fixed at both ends.